THE CULTURAL IMPLICATIONS OF CHANGE

Achieving the Proper Blend

Henry C. Alberts

Emphasis on total quality management (TQM) has been interpreted by some as a crusade against the status quo. However, the idea was to seek out beneficial changes which would improve products and services and use them to revive what some saw as moribund industrial and service sectors.

Retrospectively, it appears that more was expected from that effort than was achieved. Some research has indicated that many problems in implementing TQM originated from human beings' resistance to change. This article examines the effects of cultural considerations on attempts to implement change.

Up-Front Observations

In the writing of *Megatrends 2000*, "content analysis"[1] was a primary research tool. If one were to use content analysis as a tool to measure popular beliefs and concepts within the U.S. culture,[2] one might conclude that in the last 20 or more years our culture has demonstrated several major characteristics related to difficulty in implementing change:

— The tendency to deny that an idea or a plan has gone awry. Almost any other course seems preferable. It is almost as if one commits heresy by admitting some plan, made years before, has produced an effect other than that for which it was envisioned.

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— It would seem a preferred response to failed programs is to say, "The plan was OK, but we didn't spend enough to make it work as advertised." Spending more money to rescue the situation seems to have become "the solution of choice" to problems of a plan having been overtaken by events.

— Failure or error is "intolerable." Being wrong is stigmatized to the degree that individuals cannot (do not want to) admit to anything other than perfect behavior which produced exactly the expected results. Even more important, we recently have begun enacting legislation which "criminalizes" error: An "honest mistake" is interpreted *prima facie* as having had criminal motivation!

More rational behavior might be to view the process of learning as continuous, and to understand that when exploring new territory, error is part of learning. If we have not been there before, and no one else has either, then it may be we can't find out what "there" is like without making errors. Do babies ever know enough *a priori* to walk without ever having developed a personalized knowledge of balance and falling that can come only from "erroneous" attempts.

In its most fundamental context, learning is discovering what is true! The definitions of the word imply the opportunity for failure.[3] To learn what is true, do we not learn also what is false? The way to understanding is littered with "supposes" that, on rigorous examination, are simply wrong assumptions. Admitting failure is an important part of progress.

The wider the acceptance a paradigm has (the more acceptable a paradigm is), the more difficult it is to declare it flawed and to recognize, therefore, that change is necessary.

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No paradigm created by humans, or which includes them as fundamental elements, can be "correct" for all time. There is ample evidence of once useful cultures overtaken by events, situations where failure to change has led to conquest by those with different but, perhaps, more temporally suitable paradigms.

Based on the observations above, it might be argued that: If error is intolerable, it cannot be admitted! Therefore, the possibility of error becomes undiscussable!

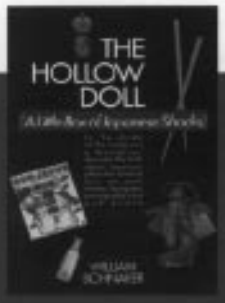
For what reasons does a culture stigmatize making wrong assumptions to test hypotheses, gain knowledge and, perhaps, to survive? Why has the United States developed what might be called "the paranoia for perfection?"

Why Is Change *So Difficult to Effect?*

To the extent that a need for change implies the existence or the possibility of error, it can be perceived as something to be avoided. But, that is only one partial explanation of what might lead to unwillingness to change a cultural paradigm. There may possibly be other considerations.

"Change"[4] can describe doing "more of the same" (e.g., adding funding to a program to achieve a result left unachieved at the original funding level) or "cancelling a program and replacing it with another," which, though untested, purports to be capable of achieving results not achieved by prior efforts.

My observations[5] lead me to believe that change involving "more of the same" is much easier to effect. In a sense, such change might correspond to a business increasing its sales of a product already being sold. Most of what is necessary to accommodate to that kind of change involves increasing production (perhaps staff and machinery) capability. Only minor changes in procedures, protocols or production mechanisms may exist; and change to production "culture" is not required.



In *The Hollow Doll*, the author recounts his observations of Japanese culture. He remarks that the Japanese do not rationalize their behavioral patterns in the Western manner.[9]

Change involving product replacement might involve change in the way people perform their tasks; and, that kind of change is more difficult to attain. One reason might be that such kinds of change involve rethinking whole sets of personal interrelationships; and that has fundamental effects on involved individuals.

In a study made for the Department of Defense, Gervaise Bushe, Associate Professor, Simon Fraser University, found that in traditionally organized production organizations, it was extremely difficult to achieve management role transformation: from "authoritarian supervision" to "work facilitation." Almost everyone could understand paying management considerably more to solve problems, but they could not grasp the value of paying management to prevent problems from happening. In fact, in one facility where TQM had taken hold, a frequent question concerned the value of paying such people when there are no problems to prevent. Similarly, it was found more difficult to change from "inspecting the quality in" to "establishing a system which facilitates quality."

The keys to understanding the problem of accommodating change may lie in two words: Custom, "a usual practice or habitual way of behaving...";[6] and Usage, "long continued or established practice, habitual or customary use of way of acting: custom: habit."[7]

When people (any group of individuals) join to provide improved existence (e.g., a family, or a founder and an original small group of individuals intimately involved in establishing a business) they begin to develop a set of customs (responses to stimuli) which enables them to consolidate their individual capacities into a gestalt.[8] It is the concept of gestalt in the sense of "the whole being greater than the sum of its parts" which differentiates the concept of cultural change from that of adding more staff. There may be no greater entity created simply by increasing the numbers of people who work continuously at fixed tasks and are replaceable by others of similar attributes. But, it is likely that embracing additional people with differing skills and attributes within a cooperative group will add to the dimension of a culture.

Groups of individuals who coexist in situations of closeness necessarily work out relationships among themselves. As the group undertakes expanded tasks and as it adds new members, the numbers of interrelative relationships expand. At some point of aggregation (i.e., as group size and diversity increase, as common, agreed-upon objectives are expanded), unless there is a set of "understood"

responses and relationships, some customs and usages known to and respected by everyone involved, the group will fail to perform as required.

In *The Hollow Doll*, the author recounts his observations of Japanese culture. He remarks that the Japanese do not rationalize their behavioral patterns in the Western manner.[9] Rather, he says, they react to stimuli in patterned, stylized and predictable ways. He further observes that, historically, when a society's stylized behavior patterns become subject to question (for whatever reason), that society becomes turbulent, with unpredictable outcomes in terms of cultural change.

The logical end point of such reasoning might lead to the observation that if cultural change is required, then:

— Reasons for that change must first be understood to be of primary importance to group survival

— Changes required in custom and usage are within the capability of group response; i.e., responding will not fracture group cohesion.

It may be that attempts to introduce TQM practices were not fully understood as being necessary to industrial survival. Also, it might be that in recognizing the need to change or die, there was an unconscious decision that the kinds of change required were almost as unacceptable as death.

Put more succinctly: When necessary cultural change is perceived as destructive to the custom and usage of a culture, the option of possible "future destruction" from outside forces may be preferred over "more immediate destruction" resulting from change initiated from within.

In engineering terms: extant cultures are systems in equilibrium. When changes to the environment within which the systems operate make change necessary for them, they can do so only within the limits of their own elasticity. Change beyond those limits may be destructive.

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An additional concept which appears to be involved is the validity, component customs and usages of a culture.[10] When custom and usage appear to be valid, it may well be difficult for arguments which aim at effecting change to prevail, regardless of how rational they may be.

Underlying problems with arguments contradicting custom and usage might concern the ideas of leverage and rate of change required:

— LEVERAGE: As processes become more complex, as organizations increase in size, as cultures expand to encompass more diverse populations, the interrelationships between members of the group become more integrated. Thus, even small changes to a minor part of the complex of relationships can force major shifts in other parts.

Rachel Carson's *Silent Spring*, used the concept of "leverage." The use of a "harmless"[11] pesticide had created conditions in the food chain which threatened our planet's ecology.

Similarly, Marshall McLuhan's *The Medium is the Message* correctly predicted that changing means of generating, transferring and presenting information would change the entire culture. Once, carrier pigeons took days to transmit limited amounts of information; today we can watch people being killed on battlefields anywhere in the world.

— RATE OF CHANGE: Because so many elements are interacting, change in any one of them (perhaps occurring as a single, "small," exogenous event) can create a situation in which everything must change to accommodate that event. The likelihood of continuing stability in all interconnected portions of a complex entity is unrealistic at best.

When things are stable until the next time something happens; when large numbers of interconnected regimes exist within which events can occur, even when steady stage conditions are achieved, that state is likely to be temporally short...change is occurring somewhere all the time.

The point of this discussion is: once a culture is established, it will resist most attempts to make change for a number of reasons, all valid from the culture survival point of view. It may be that "cultural change" can happen only when *all individuals within the* culture accept the postulate that new customs and usages are "necessary to individual survival," and when the changes necessary are within the limits of "cultural elasticity."

Thoughts on the Culture of Design

Over the past four years, the Defense Systems Management College has conducted 32 workshops which examined various portions of the defense acquisition process. During these workshops, program managers — civilian and military, government and contractor — shared problems they had experienced with the process. They proposed numerous solutions to those problems. The problems and their proposed solutions were formed into a single database.

We then convened four workshops whose purpose was to design a system based on performance of "functions"[12] involved in moving from ideas to fully supported operational weapon systems.

When we had achieved a functionally complete system design, we convened another workshop to answer whether, if implemented, the functionally designed system would create a climate in which the problems previously experienced would be precluded from occurring.

We found that of 198 problems, 66 of them would not be precluded if the functionally derived acquisition process were installed.

When we sought reasons why the problems would not be precluded or solved, we found that those problems had to do with interactions between the process and the environment within which the acquisition process operated.

An analysis of why the design process we had followed did not treat the cultural issues yielded some interesting insights about the particular design process we had used, and about the culture of design, in general.

A technical design is one driven by application of technically sound science. For this discussion, an item which uses sound technology and packages the product as technology indicates is defined as a technically sound item.

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To be successful in the marketplace, a technically sound product design may need modification in order to meet customer preferences that care nothing about technical soundness.

When customer preferences are not well integrated into perfect technical designs, the products may be perceived as "bad."

The ability to combine customer preferences with correct technology is the precious attribute of a great designer. That is, designers must understand not only technology, but also how to determine customer preferences and blend them into the product. Often the technological understanding is the easier knowledge to gain.

Incorrectly assigning customer preferences, or surveying them with flawed instruments, can lead to designs that are unsuccessful in the marketplace.

Great designers have a perception of balance that transcends the zeitgeist.[13] They arrive at some fundamental core of validity of human needs combined with technology in a product that may even evoke universal response of "goodness of product": a condition which may be commonly described by the phrase, "I don't know if it's ART, but I like it."

The combination of technical expertise, "market feel,"[14] and the capacity to blend complexity into a singular whole is the essence of good design practice. I perceive that particular gestalt as the culture of design.

In our own case, we provided the functionally correct design without considering externally created difficulties. A series of forthcoming workshops will attempt to deal with those culturally generated problems, and use that understanding to shape an acquisition process which will apply successfully the culture of design.

A Word of Caution

While we have expectations of being able to achieve the proper blend of technical correctness and product packaging in our final version of a redesigned acquisition process, we recognize that the design process takes time. We understand that installing that process will take additional time. We understand that the organization of specialized acquisition interests within and outside of the Department will seek to keep change within acceptable limits.[15] It may be that for certain kinds of complex system designs, achieving a balanced design is beyond the capabilities of today's analytical and management processes.

MANAGEMENT DELIBERATION CENTER OPENS AT DSMC

Brig Gen (Sel) Claude M. Bolton, Jr., USAF, DSMC Commandant, officiated at a ribbon-cutting ceremony on 1 June 1994, opening the new Management Deliberation Center (MDC). It occupies renovated space originally designated as the Abilene Room, after the "Abilene Paradox," a term coined by Dr. Jerry Harvey to explain how people and organizations may act counter to their own goals when implementing a decision no one may have actually favored. The Commandant stressed that the principal purpose of the room is still avoidance of bad decisions and "trips to Abilene."

The MDC has been operating since 1990 in a portable mode with its "groupware" system, which uses networked computers to share information, brainstorm problems, evaluate alternatives, develop and review plans, conduct various forms of voting, and develop group consensus.

Features of the facility include video and computer projection with two rear-screen projectors so normal room lighting can be maintained; a carpeted raised floor throughout, with wiring hidden under the floor; and extensive roll-out writeboards on two sides of the room.

Custom-designed modular furniture is planned in the near future to hide the technology when not in use. The room is distinctive in that the furniture can be reconfigured to meet the needs of different groups and various facilitation requirements. Possible room configurations will include: 8- and 12-person conference tables, 16-person U-shaped classroom, multiple 6-person workgroups, and a V-shaped negotiation arrangement.

That caveat has been a consistent theme of some of my other papers and lectures. It may be that achieving balanced designs of great complexity will necessarily await development of different kinds of mathematical constructs and different kinds of management concepts. If that is the case, it behooves us all to hasten those developments so we can get on with the task of creating the systems of the future.

Endnotes

1. The term "content analysis" began to appear after World War II in books which dealt with the intelligence community. It refers to the practice of reading media articles and observing the frequency of items which deal with some underlying subject matter. John Naisbitt refers to content analysis as one of his primary research tools for the book, *Megatrends 2000*.

2. "Culture," as used here, is defined in *Webster's New World Dictionary*, Third College Edition, as: "a) the ideas, customs, skills, arts, etc., of a people or group that are transferred, communicated, or passed along to succeeding generations...b) such ideas, customs, etc., of a particular people or group in a particular period; civilization... c) the particular people or group having such ideas, customs, etc."; p. 336.

3. *Webster's*, LEARN - "1) to get knowledge of (a subject), or skill in (an art, trade, etc.) by study, experience, instruction, etc.... 2) to come to know...3) to come to know how..."; p. 769.

4. *Webster's*, CHANGE: "1) to put or take (a thing) in place of something else; substitute for, replace with..."; p. 234.

5. A personal kind of "content analysis."

6. *Webster's*, p. 341.

7. *Webster's*, p. 1469.

8. *Webster's*, GESTALT: "...integrated structures or patterns that make up all experiences and have specific properties which can neither be derived from the elements of the whole nor considered simply as the sum of these elements," p. 567.

9. That is, they do not reason responses to stimuli in terms of Aristotelian cause and effect.

10. *Webster's* From the word VALID; "...well grounded in principles or evidence; able to withstand criticism or objection, as in argument; sound," p. 1473.

11. DDT was found to be harmless to humans before it was permitted in widespread use. Since the concern was for humans, no one thought to determine its effect on other, noninsect life forms.

12. *Webster's*, FUNCTION: "1) The normal or characteristic action of anything; esp., any of the natural specialized actions...2) A special duty or performance required in the course of work or activity...."

13. Literally translated from the German as "Ghost of the Times."

14. The term attempts to describe a special sense of market requirements.

15. See my other papers, which define Catch 23, Catch 24, Catch 25 and Catch 26.

References

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Catch 23 *et seq*; Henry C. Alberts, Presented to the Military Operations Research Society, West Point, N.Y. October 1991.

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